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(71) Applicant (for all designated States except US): **KONINKLIJKE PHILIPS ELECTRONICS N.V.** [NL/NL];
Groenewoudseweg 1, NL-5621 BA Eindhoven (NL).

(72) Inventor; and

(75) Inventor/Applicant (for US only): **HARVEY, Paul, R.**
[GB/NL]; c/o Prof. Holstlaan 6, NL-5656 AA Eindhoven (NL).

(74) Agent: **COHEN, Julius, S.**; Prof. Holstlaan 6, NL-5656
AA Eindhoven (NL).

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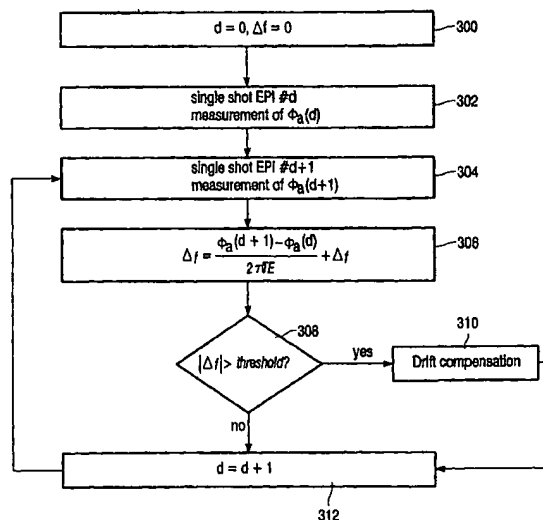
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(54) Title: A METHOD OF MONITORING A MAGNETIC FIELD DRIFT OF A MAGNETIC RESONANCE IMAGING APPARATUS



(57) Abstract: The invention enables to monitor a magnetic field drift of a magnetic resonance imaging apparatus on the basis of the magnetic resonance signals, which are acquired during magnetic resonance image data acquisition, such as by single shot EPI or by a gradient echo sequence. The phases of at least two magnetic resonance signals are acquired an echo time after the corresponding RF excitations. This corresponds to the central k-space line, which has frequency encoding but no phase encoding. The difference of two consecutive phase measurements, which are acquired at a certain time interval provides the shift of the resonance frequency. This enables monitoring of the shift of the resonance frequency and compensation of the magnetic field drift.

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